FIGURE 1A

CHIR 12.12 light chain:

leader:

MALPAQLLGLLMLWVSGSSG

variable:

DIVMTQSPLSLTVTPGEPASISCRSSQSLLYSNGYNYLDWYLQKPGQSPQVLISLGSNRASG
VPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQARQTPFTFGPGTKVDIR

constant:

RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSK
DSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

FIGURE 1B

CHIR-12.12 heavy chain:

leader:

MEFGLSWVFLVAILRGVQC

variable:

QVQLVESGGGVVQPGRSLRLSCAASGFTFSSYGMHWVRQAPGKGLEWVAVISYEESNRYHAD
SVKGRFTISRDNSKITLYLQMNSLRTEDTAVYYCARDGGIAAPGPDYWGQGTLVTVSS

constant:

ASTKGPSVFPLAPASKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGL
YSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVF
LFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVV
SVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL
TCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV
MHEALHNHYTQKSLSLSPGK

alternative constant region:

ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGL
YSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVF
LFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVV
SVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL
TCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV
MHEALHNHYTQKSLSLSPGK

FIGURE 2A

DNA sequence of light chain of CHIR-12.12:

5'atggcgcicccigctcagcloclggggctgciuutgctotgggtctctggatccagtggggatatitgtgatgactcagtctccaolcto
cctgacccgtcacccclgggagagccggcctccatctcctgcaggtccagtcagagcoicctgtalagtaatggatacaactatttggattg
gtacctgcagaagccagggcagtctccacaggloctgalctctctttgggttctaatogggcctccggggtcccctgacaggttcagtggca
gtggatcaggcacagattttacactgauaatcagcagagtggaggctgaggatgttggggttattactgcatgcuagctcgacaaact
ccattcaolttcggccctgggaccaaagtggatatcagacgaactgtggctgcacoatctgtcttcatcttcccgccatctgatgagcagt
tgaaatctggaactgcctctgttgtgtgcctgctgaataacttctatcccagagaggccaaagtacagtggaaggtggataacgcccctcc
aatcggglaactcccaggagagtgtcacacgagcaggacacgcaaggacagcacctacagcctcagcagcaccotgacgctgagcaa
agcagactacgagaaacacaaagtctacgcctgcgaagtcaccecatcaggggcctgagctcgcccgtcacaaagagcttcaacaggg
gagagtgttag3'

FIGURE 2B

DNA sequence of heavy chain of CHIR-12.12 (including introns):

5'atggagttlgggctgagctgggtttlccttgtlgctattltaagaggtgtccagtgtcaggtgcagttggtggagtctgggggaggcgt
ggtccagcclggaggglccctgagactctcctgtgcagccctctggattcaccttcagtagctatggcatgcactgggtccgccaggcтc
caggcaaggggclggagtggglggcagtlatatcatatgaggcaaagtautagataccatgcagactccgtgaaggcgcogattcacca
tctccagagacaatlccaagatcaogctglalclgcaaatguacagcctcagaactgaggacacggctgtgtattactgtgcgagagat
gggggtatagcagcacclgggcclgctactggggccagggaaccclggtcacccctoctougcaagtacoaagggcccatccgt
cltccccctggcgcccgctagcaagagcacctctgggggcacagcggccctgggtgcctggtcaaggactacttccccgaaccgg
tgacggtgtcgtggaactcaggcgccctgaccagcggcgtgcacaccttccccggctgtcctacagtcctcaggactctactccctcag
cagcgtggtgaccgtgccctccagcagcttgggcacccagacctacatctgcaacgtgaatcacaagcccagcaacaccaaggtgg
acaagagagttggtgagaggccagcacaggggagggagggtglgtgctggaagccaggctcagcgctcctgcctggacgcatcccg
gctatgcagtccagtccaggggcagcaaggcaggccccgtctgcctcttcacccggaggccictgcccgccccatoatgctcagg
gagaggtottotggoftttllcccaggctctgggcaggcacaggctaggtgcccctaacccaggoccigoacacaaaggggcaggt
gclgggctoagaccctgccaagagccatatccggaggacctgcccctgacotaagcccaccccaaaggccaaactctcoactccc
tcagctcggucaccttotolcctcccagattccagtaaciocoaatctttctctctgcagagcccaaatcttgtgacaaaactcacacatgc
coaccgtgcccaggtaagccagccoaggccctcgccctccagctcaagcgggacaggtgcoctagagtagcctgcutccaggggac
aggccooagccgggtgctgacacgtccacctccalctcttcctcagcaactcctggguggacogglcagtctlcctcttcccccc
aaaaccccnaggacacocctcatgatctcccggcaccoclgaggtcacatgcglggtggtggucgtgagcaogaagaccctgaggtcu
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totgcccigagaglgacogctgtaccuccctctglccctacagggcagcccggagaaccacugglgtaoaccctgccccculccogg
gaggagatgaccuangauccaggtcagcclgacctgcclggtcaaaggotlclatcccaagogacatcgccgtggagtgggagagcaau
tgggcagccggugaocaactacaugaccacgcctcccgtgctggactccgacggctccttcttcctctatagcaagctcaccgtggac
aagagcaggtggcagcagggguacgtcttctcalgctccgtgatgcatgaggctctgcacaaccacacacgcagaagagcotctcc
ctgtctccgggtaaatga3'

FIGURE 3A

<u>CHIR-5.9 light chain:</u>

leader:

MALLAQLLGLLMLWVPGSSG

variable:

AIVMTQPPLSSPVTLGQPASISCRSSQSLVHSDGNTYLNWLQQRPGQPPRLLIYKFFRRLSG
VPDRFSGSGAGTDFTLKISRVEAEDVGVYYCMQVTQFPHTFGQGTRLEIK

constant:

RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSK
DSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

FIGURE 3B

<u>CHIR-5.9 heavy chain:</u>

leader:

MGSTAILALLLAVLQGVCA

variable:

EVQLVQSGAEVKKPGESLKISCKGSGYSFTSYWIGWVRQMPGKGLEWMGIIYPGDSDTRYSP
SFQGQVTISADKSISTAYLQWSSLKASDTAMYYCARGTAAGRDYYYYYGMDVWGQGTTVTVS
S

constant:

ASTKGPSVFPLAPASKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGL
YSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVF
LFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVV
SVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL
TCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV
MHEALHNHYTQKSLSLSPGK

alternative constant region:

ASTKGPSVFPLAPASKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGL
YSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVF
LFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVV
SVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL
TCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV
MHEALHNHYTQKSLSLSPGK

FIGURE 4A

Coding sequence for short isoform of human CD40:

```
  1 atggtlcgtc tgcotclgca gtgcgtcctc tggggctgct tgctgaccgc tgtccatcca
 61 gaaccaccca ctgcatgcag agaaaaacag lacctaalaa acagtcagtg ctgttclltg
121 tgccagccag gacagaaact ggtgagtgac tgcacagagt tcactgaaac ggaatgcctt
181 ccttgcggtg aaagcgaatt cctagacacc tggaacagag agacacactg caacccagcac
241 aaatactgcg accccaacct agggcltcgg gtccagcaga ggggcaccta agaascagac
301 accatctgca cctgtgaaga aggctggcac tglacgagtg aggcctgtga gagctgtglc
361 ctgcaccgct catgctcgcc cggotttggg gtcaagcaga llgctacagg ggtlctgat
421 accatctgcg agccctgccc agtcggcttc ttctccaatg tgtcatctgc tttcgaaaaa
481 tgtcaccctt ggacaaggtc cccaggatcg gctgagagcc ctggtggtga tccccatcat
541 cttcggatc ctgtttgcca lcctcttggt gctggtcttt atcaaaaagg tggccaagaa
601 gccaaccaat aa
```

FIGURE 4B

Encoded short isoform of human CD40:

```
  1 mvrlplqcvl wgclltavhp cpptacrekq ylinsqccsl cqpgqklvsd ctcftctccl
 61 pcgesefldt wnrethchqh kycdpnlglr vqqkgtsctd lictccegwh clseacescv
121 lhrscspgfg vkqiatgvsd ticepcpvgf fsnvssafek chpwtrspgs acspggdphh
181 lrdpvchplg aglyqkgsqe anq
```

FIGURE 4C

Coding sequence for long isoform of human CD40:

```
  1 atggttcgtc tgcctctgca gtgcgtcctc tggggctgct tgctgacccc tgtccatcca
 61 gaaccaccca ctgcatgcag agaaaaacag tacctaataa acagtcagtg ctgttctttg
121 tgccagccag gacagaaact ggtgagtgac tgcacagagt tcactgaaac ggaatgcctt
181 ccttgcgggg taaagcgaat cctagacacc tggaacagag agacacactg ccacacagcc
241 aaatactgcg accccaacct tggccttggg gtccagcaga gggggacccc agaaacagac
301 accatctgca cctgtgaaga aggctggcac tgtacgagtg aggcctgtga gagctgtgtc
361 ctgcacogct catgctgcc caggcttggg gtcaagcaga ttgctacagg ggttctgtgt
421 accatctgcg agccctgccc agtcggcttc ttctccaatg tgtcatctgc tttcgaaaaa
481 tgtcacccct ggacaagctg tgaggaccaa gtcctggttg tgcaacaggc aggcacaaac
541 aagactgatg ttgtctgtgg tccccaggat cggctgagag ccctggtggt gatccccatc
601 atctcggga ctctgttgc catcctcttg gtgctgttct tgctcaagaaa ggtggccaag
661 aagccaacca taaaggcccc cacccaaag cagganiccc aggagatcaa ttttcccgac
721 gatcttcctg gctccaacac tgcctctcca gtgcaggaga ctttacatgg atgccaaccg
781 gtcacccagg aggatggcaa agacagtcgc atctcagtgc aggagagaca gtga
```

FIGURE 4D

Encoded long isoform of human CD40:

```
  1 mvrlplqcvl wgclltavhp cpptacrekq ylinsqccsl cqpgqklvsd cteftetel
 61 pcgesafldt wnrthchqh kycdpnlglr vqqkgtsctd tictccogwh ctscacescv
121 lhrscspgfg vkqiatgvsd ticepcpvgf fanvssafek chpwtscetk dlvvqqagln
181 kidvvcgpqd rlralvvipi ifgilfaill vlvflkkvak kptnkaphpk qcpqcinfpd
241 dlpgsnlaap vqetlhgcqp vtqcdgkcsr isvqcrq
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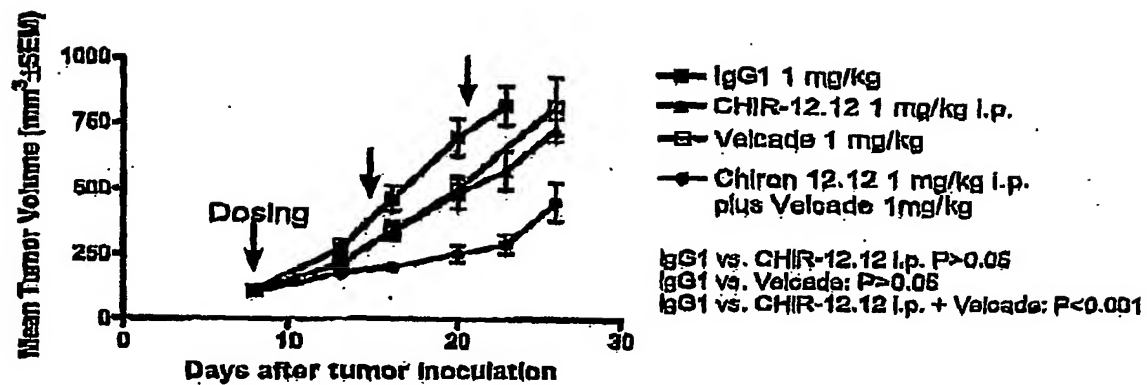
FIGURE 5

FIGURE 6